

HP-7

Shoulder Plane

Owner's Manual



Handcrafted by Bridge City Tool Works
A Division of Fine Tools, LLC

Congratulations on your purchase of the HP-7 Shoulder Plane! Please read the following general usage and set-up notes prior to using your new plane.

GENERAL USAGE NOTES

The HP-7 plane iron is bedded bevel up at 15°. The primary angle of the iron is factory ground to 25° with an additional 2° micro bevel for an included attack angle of 42°. As with all planes, a razor sharp iron is mandatory for pleasurable and efficient use.

The iron is approximately 0.004" – 0.006" wider than the plane body. This ensures your cuts will create razor clean corners.

Lateral adjustments of the cutting edge are accomplished by manually shifting the iron around the thumb nut of the depth mechanism.

The HP-7 IRON: SHARPENING and CARE

The secret to sharpening any plane iron is to NEVER let the iron get dull. This is particularly true for planes that are used for joinery purposes. Although woodworkers have varying opinions regarding sharpening techniques and abrasives, we are confident you will be pleased with the following recommendations;

1. We recommend the use of a honing jig for all straight irons.
2. For removing nicks and other deformations in the cutting bevel we recommend an 800 grit water stone (or equivalent), progressing to a 1200 grit water stone to remove the striations created by the 800 grit stone. A 4000 grit stone can be used to clean the striations from the 1200 grit stone and a final edge polish can be accomplished with an 8000 grit water stone. Pay particular attention to keeping the cutting edge perpendicular (square) to the sides. Failure to control this angle makes it almost impossible to make accurate rabbet and shoulder cuts.
3. This same sequence of stones should be used to create a mirror surface on the back of the iron prior to first use. Always remove any slight burrs on the back of your iron with a leather strop

or similar non-marring process. Aggressive or careless sharpening will never allow your plane to perform with optimal results.

4. We strongly recommend that you coat the iron with a rust-inhibitor (i.e., WD-40™ or Boeshield™) prior to storage.
5. It is a good idea to have a replacement iron available. You may order additional irons and learn more about our plane irons by visiting our online store; www.bridgecitytools.com, or calling our customer service desk at our toll-free number: (800) 253-3332.

Lastly, the heart of any plane is the iron. Frequent sharpening is much easier than rebuilding an edge that has been neglected. The higher the pitch of the plane, the more you will notice a dull iron because of the effort required to engage the cutting edge with your work piece. We encourage you to keep your irons sharp at all times. We also encourage you to be aware at all times that you are working with a (hopefully) razor-sharp tool and to govern your actions accordingly.

CARE AND CLEANING OF THE HP-7 Shoulder Plane

The beauty of brass is that it does not rust. However, over time the oils from human skin can make brass splotchy as it tarnishes. To keep the tool looking new, it must be wiped clean after each use using a high quality paste wax. Alternatively, frequently used brass tools build up a patina from a combination of tarnish and skin oils that is appreciated by many.

Periodically wipe the mating surfaces of the HP-7 body and adjustable front sole to remove dust and grime. We recommend doing this with each sharpening cycle.

Lay the plane on its side when not in use and always protect the exposed cutting edge from accidental contact with anything that may damage the cutting geometry. The same is true with the plane body; do not allow this precision instrument to be damaged by careless storage.

IRON DEPTH and LOCKING MECHANISM ADJUSTMENTS

Shaving thickness is controlled by adjusting the position of the iron using the adjustment wheel in the rear of the plane. Loosen the front throat so it is clear of the iron. Unlock the rear handle by wedging the ring finger of one hand between the handle and the plane body and lifting. Start with the iron in a position where it is just high enough not to cut. Adjust the depth by making 1/8 rotations of the iron adjustment knob until you feel the iron just begin to protrude from the sole of the plane. At this point, adjust the throat to a distance that is approximately 1-1/2 times the distance of the thickest shaving you plan to make. Adjust final depth of cut from this position.

NOTE: This is a precision plane--there is no need to overly tighten the front throat.

The blade locking mechanism is factory adjusted for optimal use. Should the need arise for this mechanism to be re-adjusted, please follow these steps;

1. Hold the plane in one hand and place the ring finger of your other hand between the plane body and the stainless steel handle. Release the locking handle by wedging your ring finger upward until the mechanism releases. Leave the iron in the plane body.
2. Using the long end of a 5/32" hex key wrench, loosen the pressure pad screw (visible from the top of the plane) and allow the locking handle to drop under its own weight—it should be completely and obviously loose. Leave the 5/32" hex key wrench in place.
3. Slowly tighten the 5/32" hex key wrench with two fingers and stop when you first notice the pressure pad encountering resistance.
4. Looking at the short end of the 5/32" hex key wrench, imagine it is an hour hand on a clock. Rotate the short end of the hex key wrench “two hours” clockwise. Your HP-7 is now correctly adjusted.

IMPORTANT NOTE: Due to the mechanical advantage of the stainless steel locking handle, it is possible to over tighten the locking pad and deform the sole of the HP-7. **Should this occur, be forewarned that you have completely voided the factory warranty for this plane.**

Once a year, use a light oil to lubricate all moving parts.



SATISFACTION GUARANTEE

If, for any reason, you are not 100% satisfied with your purchase, simply return the item WITHIN 90 DAYS after receipt for a merchandise exchange or full refund.

OUR RETURN/REPAIR POLICY

If your tool has a workmanship defect and it is within one year from the original date of purchase, simply send it to us and we will determine whether to repair or replace the tool, at no charge to you. If your tool does not have a defect or it is more than one year from the purchase date, you may get it recalibrated, functionally repaired, or aesthetically restored for \$35.00 per hour (1 hour minimum), plus shipping. Upon receipt, we will determine an estimated repair cost and contact you prior to performing any repair. Tools which are deemed functionally irreparable may be applied (at our discretion and with your permission only) as a 20% credit towards an identical or similarly priced tool, if available. Unfortunately, excessive fire/flood or abuse damage is not covered.

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